

## NEW SPECIES AND DISTRIBUTION NOTES OF MEXICAN AND BOLIVIAN *IDIODONUS* (HOMOPTERA: CICADELLIDAE)<sup>1</sup>

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ABSTRACT: Six new species of *Idiodonus*, *I. albifrons* n.sp., *E. sexpunctatus* n.sp. *I. marginatus* n.sp., *I. pallidus* n.sp., *I. nigrifrons* n.sp., all from Mexico and *I. costatus* n.sp. from Bolivia are described. A new name *Idiodonus beamerellus* is proposed for *I. beameri* DeLong (1946) preoccupied by *I. beameri* Ball (1937). New distribution notes are given for *I. wickhami* Ball.

The *Idiodonus* of Mexico were treated by DeLong (1946) who listed 35 species, 32 of which were described as new. Six species are being described at this time, five from Mexico and one from Bolivia. A new name *Idiodonus beamerellus* is proposed for *I. beameri* DeLong (1946), preoccupied by *I. beameri* Ball (1937). Notes on new distribution records of *I. wickhami* Ball are cited.

The male genital structures in this genus are of little or no specific value. Color patterns and the female 7th sternum are therefore used for species identifications. All types are in the DeLong collection, Ohio State University.

### *Idiodonus albifrons* n.sp. (Figs. 1, 7)

Length of female 4.5 mm. Male unknown. Crown broadly rounded, appearing parallel margined 2 1/2 times as wide between eyes at base as long at middle. Color: face white without markings. Crown sordid yellow with a large black spot just above margin next to each eye and 2 smaller black spots between them. Pronotum gray, tinged with yellow. A small black spot near anterior margin behind each eye. Scutellum yellow, 2 proximal small, black spots at middle. Forewings grayish subhyaline, veins brownish.

Female seventh sternum with posterior margin excavated about 1/4 distance to base, and bearing a spatulate process which extends to length of lateral angles.

Holotype female: Chilpancingo, Gro. Mexico 25-X-1941, DeLong. Good and Caldwell colls.

*I. albifrons* is related to *I. schwartzi* (Ball) (1911, p. 197) and can be separated from it by the 2 large black spots close to the eyes, the 2 smaller central proximal spots, the 2 black spots on the pronotum, the 2 proximal minute black spots on the scutellum and by the mesally spatulate 7th sternum of the female.

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*Idiodonus sexpunctatus* n.sp.

(Figs. 2, 8)

Length of female 5.5 mm. Male unknown. Crown slightly produced, approximately 1 1/2 times as wide at base between eyes as long at middle. Color: face pale yellowish with remnants of black arcs and a black spot just below each ocellus next to each eye. Crown yellowish, tinted with orange, with 2 proximal large black spots at apex and 2 minute round black spots just basad of larger spots. Pronotum tinted with a faint dark brown transverse mark at center. Forewings pale gray subhyaline, veins brown.

Female 7th sternum with posterior margin slightly produced between the lateral angles, bearing a median squarish notch 1/6 length of segment, with a convexly rounded base.

Holotype male: Mexico, Rio Frio, D.F. (K-47) 18-X-1941, DeLong, Plummer, Caldwell, Good colls.

*I. sexpunctata* is related to *I. andanus* DeLong (1946, p. 29) and can be separated from it by the 2 small proximal black spots on the middle of the crown, by the absence of small spots on the pronotum and by the squarish excavation of the 7th sternum of the female.

*Idiodonus marginatus* n.sp.

(Fig. 3)

Length of male 4.5 mm. Female unknown. Crown broadly rounded, only slightly produced, half as long at middle as wide at base between eyes. Color: face pale yellow. Crown pale brown with a broad marginal black transverse band between eyes. Pronotum pale brownish with dark gray coloration on caudal margin. Scutellum yellowish with a dark brown T-shaped mark at middle. Forewings grayish subhyaline, veins mostly brown except white claval veins.

Male genital plates elongate, triangular, 3 times as long as wide at middle, apices pointed.

Holotype male: Mexico, Tulancingo, Hidalgo (K-129) 25-X-1945, Stone, DeLong, Hershberger, Elliot colls.

*I. marginatus* is related to *I. turpiter* DeLong (1946, p. 28) and can be separated from it by the black transverse band on the margin of the crown.

*Idiodonus pallidus* n.sp.

(Figs. 4, 9)

Length of female 5 mm, male 4.6 mm. Crown slightly produced and broadly rounded, 1 1/2 times as wide at base between eyes as long at middle. Color: face pale yellowish with remnants of brown arcs each side. A small round black spot next each eye below ocellus. Anterior coronal margin narrowly whitish with 4 transverse elongate black spots, 2 near apex, 2 near eyes. Remainder of crown brown with darker brown coloration along with the white margin. Pronotum brown, scutellum brown with a white V-shaped wedge at middle each side. Forewings brown, veins brown except the terminal portion of claval veins next to commissure and the veins of posterior apical cells, which are white.

Female 7th sternum with posterior margin slightly produced and broadly shallowly notched at center, 1/6 distance to base.

Male plates elongate, triangular, 5 times as long as wide at middle.

*I. pallidus* is related to *I. anademus* DeLong (1946, p. 29) and can be separated from it by the elongate spots on the crown, the white spots on the

scutellum and the white claval veins of the forewing.

*Idiodonus nigrifrons* n.sp.  
(Fig. 5)

Length of male 5 mm. Female unknown. Crown slightly produced, broadly rounded, half as long at middle as wide at base between eyes. Color: face black, crown yellow with a black transverse band in front of eyes. Pronotum yellow, a large irregular shaped spot behind each eye with a black, broken, transverse band extending across basal part of pronotum, brownish irregular pigment on apical portion. Scutellum yellowish with a dark brown spot near each basal angle. Forewings grayish subhyaline, veins brown.

Male genital plates elongate, triangular, 4 times as long as wide at middle, apices sharply pointed.

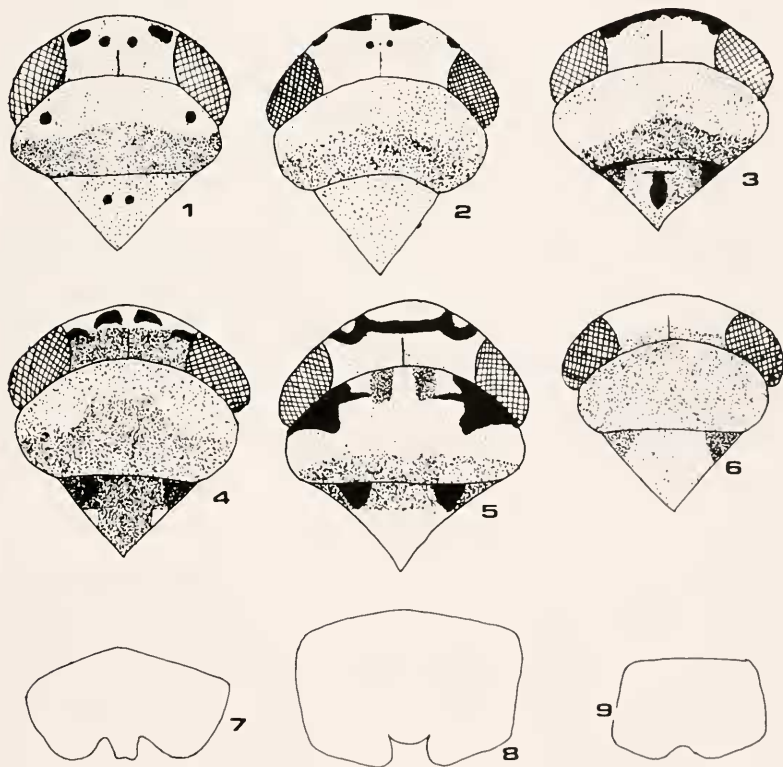


Fig. 1. *Idiodonus albifrons* n.sp. head, pronotum and scutellum. Fig. 7 female 7th sternum. Fig. 2. *I. sexpunctata* n.sp. head, pronotum and scutellum, Fig. 8, female 7th sternum. Fig. 3. *I. marginatus* n.sp. head, pronotum and scutellum. Fig. 4. *I. pallidus*, n.sp. head, pronotum and scutellum, Fig. 9 female 7th sternum. Fig. 5. *I. nigrifrons* n.sp. head, pronotum and scutellum. Fig. 6. *I. costatus* n.sp. head, pronotum and scutellum.

Holotype male: Mexico, Huachinango, Puebla (K.-170) 25-X-1945, Stone, DeLong, Hershberger, Elliott colls.

*I. nigrifrons* is related to *I. vinculus* DeLong (1946, p. 15) and can be separated from it by the black face, the black transverse band on the apical portion of the crown and the black spots on the pronotum and scutellum.

***Idiodonus costatus* n.sp.**

(Fig. 6)

Length of male 4.2 mm. Female unknown. Crown scarcely produced, almost 3 times as wide at base between eyes as long at middle. Color: face white, crown white, basal portion along margin brownish. Pronotum brownish, scutellum brownish, caudal half sordid whitish, basal angles dark. Forewings brown with costal margin broadly white.

Male genital plates elongate, triangular, 3 times as long as wide at middle, apices tapered, pointed.

Holotype male: Bolivia, Santa Cruz, 19-VIII-1980, Donald Foster coll.

*I. costatus* is related to *I. rubellus* DeLong (1946, p. 15) and can be separated from it by the white crown, the absence of black spots on the crown, the absence of red coloration and the broad white costal wing margin.

***Idiodonus beamerellus* n.n. for *I. beameri* (1946) preoccupied by *Idiodonus beameri* Ball (1937)**

***Idiodonus wickhami*** Ball was described from specimens collected in Arizona. It has been collected abundantly in Mexico, especially at higher altitudes, 6,000 to 9,000 feet. Records at hand are: Mt. Popo, D.F. 11,000 ft., Mexico City D.F. 7,500 ft., La Guarda D.F. 8,500 ft., Chapingo, D.F. 9,900 ft., Toluca D.F. 9,700 ft., Rio Frio D.F. 10,300 ft., Zitacuara, Mich. 6,700 ft., Carapan, Mich. 5,000 ft., Zacapu, Mich. 6,500 ft. and Pueblo, Pue. 8,500 ft.

A reddish form has been collected at Santa Cruz, Bolivia by Donald L. Foster.

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